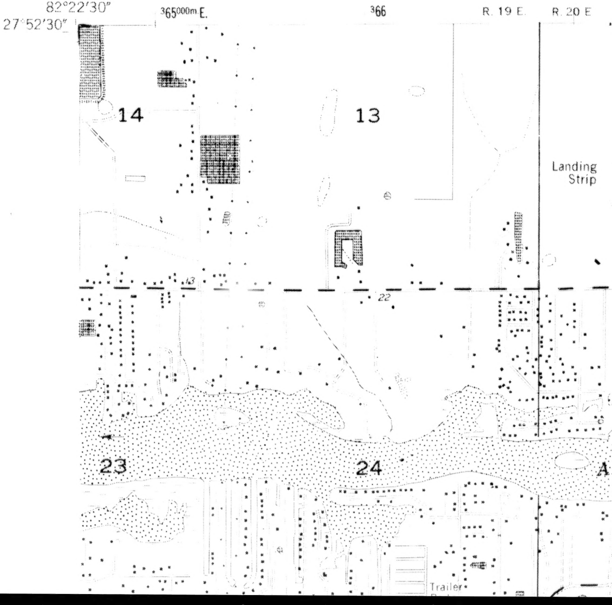
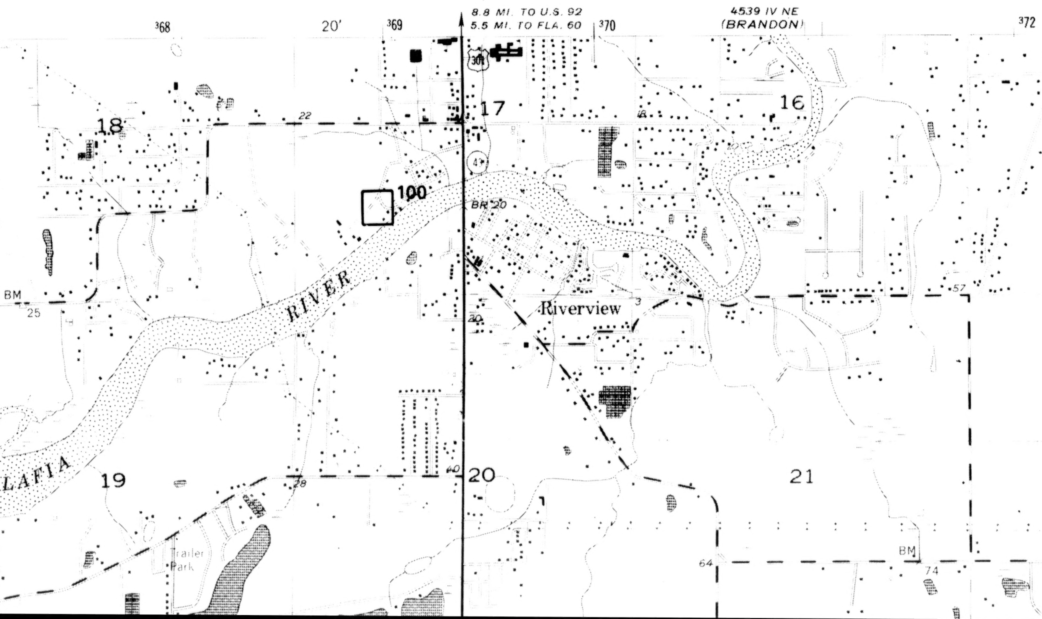
RESOLUTION RESOLUTION TEST CHART
L10
L11
L12
L13
L14
L15

RESOLUTION RESOLUTION TEST CHART
L10
L11
L12
L13
L14
L15

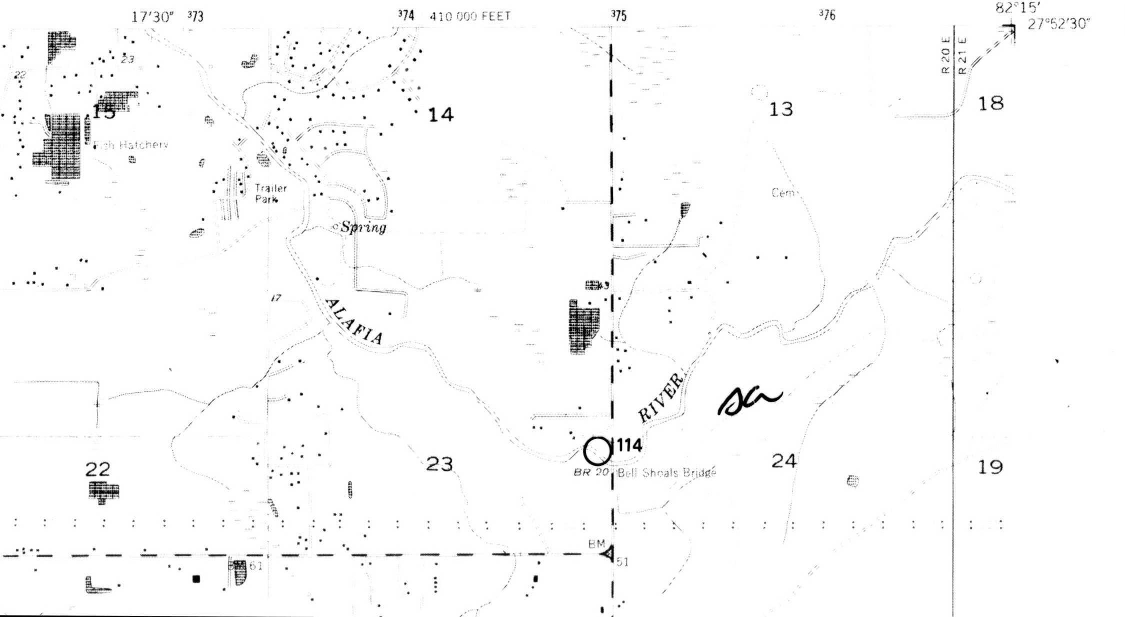
UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY


82°22'30"
27°52'30"
365000m E.
366
R. 19 E.
R. 20 E.
14
13
Landing
Strip
13
22
23
24
A
Trailer


8.8 MI. TO U.S. 92
5.5 MI. TO FLA. 60
4539 IV NE
(BRANDON)
368
20'
369
370
372
301
18
17
16
22
41
100
BR 20
RIVER
LAFIA
Riverview
BM
25
57
3
30
28
40
19
20
21
64
BM
74
Trailer
Park

MAY 19 '88

RIVERVIEW QUADRANGLE
FLORIDA-HILLSBOROUGH CO.
7.5 MINUTE SERIES (TOPOGRAPHIC)


17'30"
373
374
410 000 FEET
375
376
82°15'
27°52'30"
R 20 E
R 21 E
23
22
15
14
13
18
Fish Hatchery
Trailer Park
Spring
Cem
43
17
ALAFIA
RIVER
114
BR 20
Bell Shoals Bridge
22
23
24
19
BM
51
BM 61

I 49.89/2: 85(15) map B21

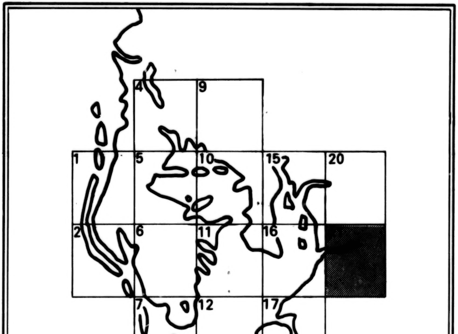
MAP B21

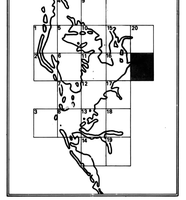
ORIGINAL

TAMPA BAY ENVIRONMENTAL ATLAS

WATER RESOURCES

RIVERVIEW


4
9
1
5
10
15
20
2
6
11
16
7
12
17



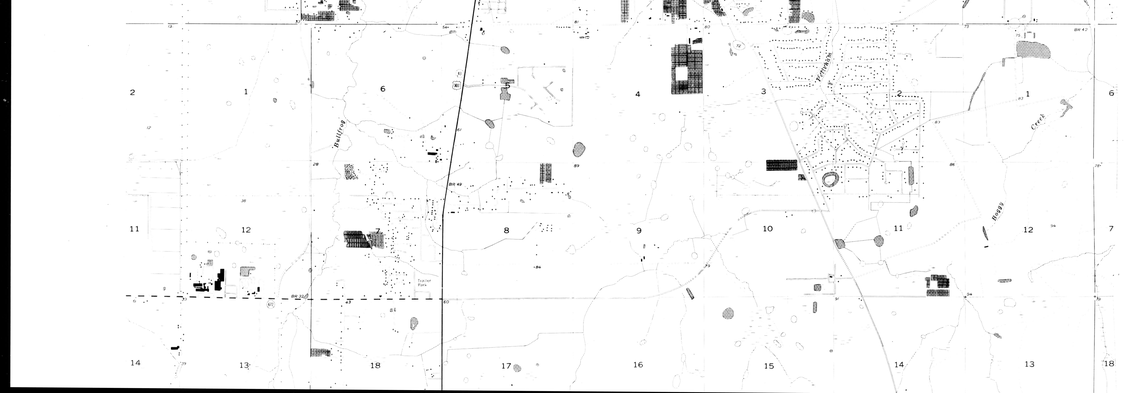
Scale 1:24,000

1984

TOPICAL MAPS IN THIS ATLAS:
A. BIOLOGICAL RESOURCES
B. WATER RESOURCES

Produced by U.S. Fish and Wildlife Service
Projection and 1,000 meter grid, zone 17 Universal Transverse Mercator
10,000 foot grid ticks based on Florida coordinate system, east and west zones

Overlay material compiled in 1984 from latest available data obtained from



Projection and 1,000 meter grid, zone 17: Universal Transverse Mercator
10,000-foot grid ticks based on Florida coordinate system, east and west zones

Overlay material compiled in 1984 from latest available data obtained from Federal, State and Local government agencies and other sources.

There is no map A19 due to a lack of data.

LEGEND

*****35***** MEAN ANNUAL MID-DEPTH SPECIFIC CONDUCTIVITY ISOPLETH (WATER QUALITY) CONTOUR MAP
Five year mean annual specific conductivity September 1978 - August 1983 (mmhos)

POINT SOURCE DISCHARGES *

▲10 Q= — Industrial Point Source Discharge. Q is permitted capacity in total gallons per day (tgd) or in millions of gallons per day (mgd).

△10 Q= — Municipal Point Source Discharge. Q is permitted capacity in total gallons per day (tgd) or millions of gallons per day (mgd).

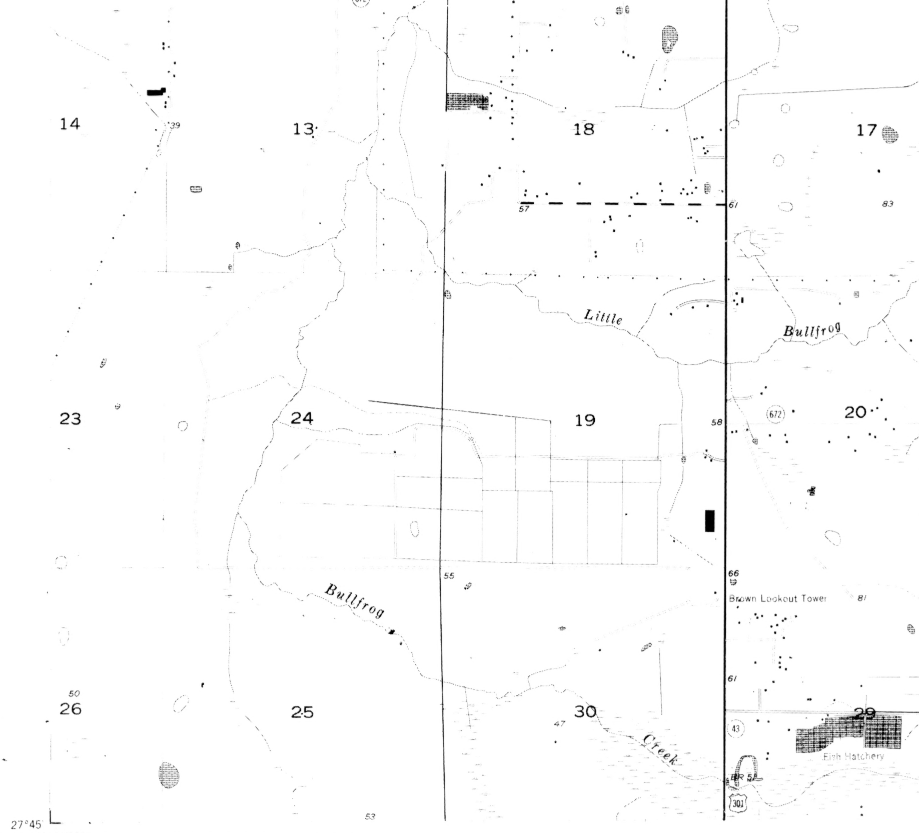
DREDGE SPOIL DISPOSAL SITES

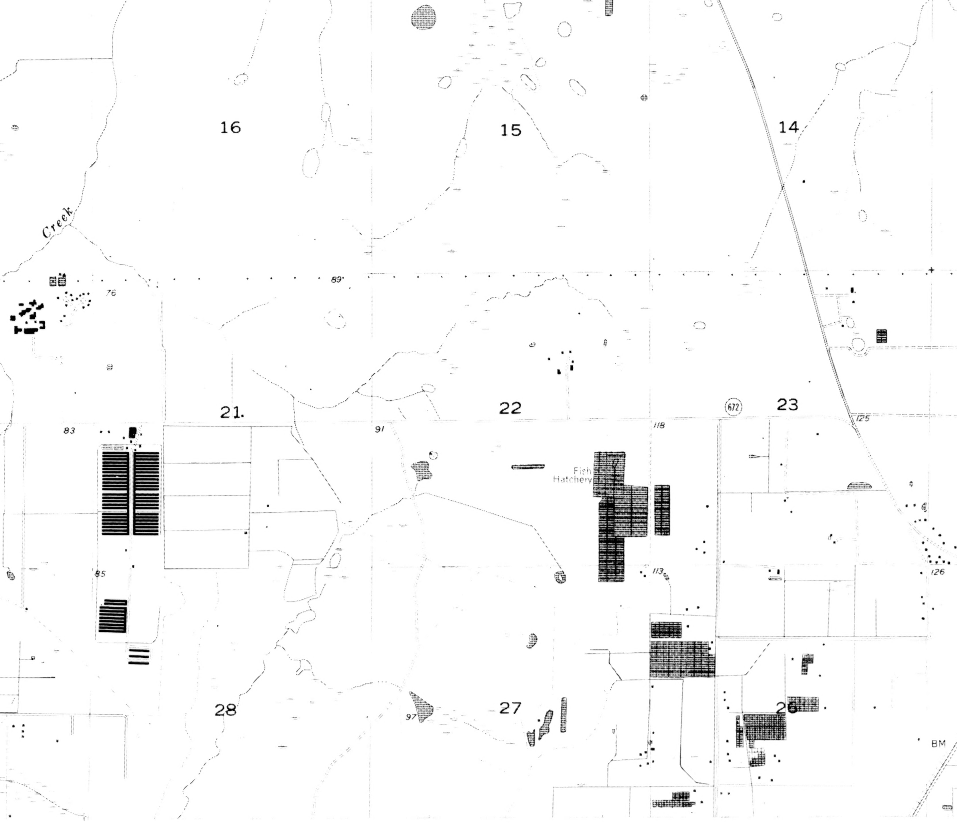
TIDE STATION *
(National Ocean Service)

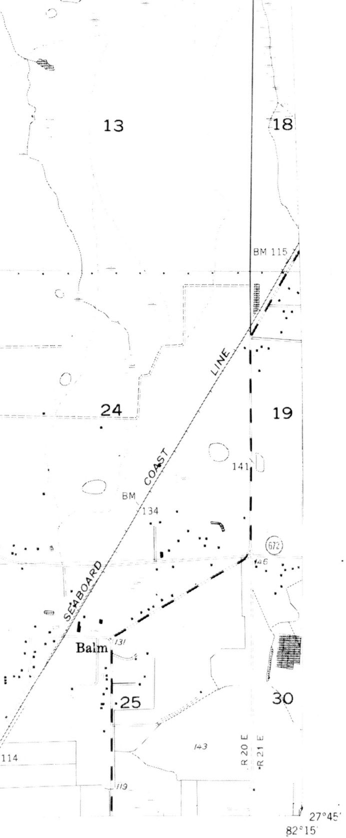
10 Active tide station. The tide station number is listed next to the symbol.

10 Inactive tide station location. The tide station number is listed next to the symbol.

WATER QUALITY SAMPLING STATION *
(Hillsborough County Environmental


14
13
18
17
39
57
61
83
Little
Bullfrog
23
24
19
20
(672)
58
66
Brown Lookout Tower
81
55
Bullfrog
61
50
26
25
30
29
47
Creek
(43)
Fish Hatchery
BR 52
301
53
27°45'


16
15
14
Creek
76
89
21
22
23
672
125
83
91
118
Fish
Hatchery
85
113
126
28
27
26
97
BM


13
18
BM 115
LINE
24
19
COAST
141
BM
134
672
146
SEABOARD
Balm
131
25
30
143
R 20 E
R 21 E
114
119
27°45'
82°15'

TIDE STATION *
(National Ocean Service)

⊡ 10 Active tide station. The tide station number is listed next to the symbol.

☐ 10 Inactive tide station location. The tide station number is listed next to the symbol.

○ 10 **WATER QUALITY SAMPLING STATION ***
(Hillsborough County Environmental Protection Commission)
Five year seasonal means, Sept. 1978 - Aug. 1983

——2—— **BATHYMETRY**

The contour interval is 2.0 meters with an initial 1.0 meter supplemental contour line added to better define shoals and inshore tidal flats.

—·—·—·— **INTERTIDAL ZONE**

This zone demarcates the area exposed and flooded by the tides and occurs between the line and the shore.

GENERALIZED SEDIMENT MAP

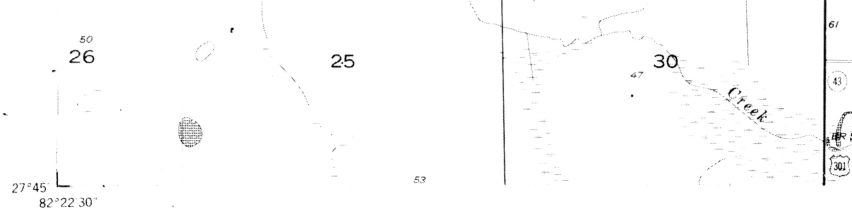
▨	Sand
▨	Shelly Sand
▨	Silty Sand
▨	Clayey Sand
▨	Sandy Clay
▨	Silt

NET TIDAL CURRENT

Resultant tidal current. The direction is indicated by the arrow and the discharge range is feet per second.

→	0.01 - 0.10 ft/sec
⟶	0.11 - 0.20 ft/sec
⟶	0.21 - 0.30 ft/sec
⟶	0.31 - 0.50 ft/sec
⟶	> 0.50 ft/sec

F **FRESHWATER/SALTWATER INTERFACE**



THE TAMPA BAY ENVIRONMENTAL ATLAS WAS PRODUCED BY THE U.S. FISH AND WILDLIFE SERVICE, DIVISION OF BIOLOGICAL SERVICES NATIONAL COASTAL ECOSYSTEMS TEAM (FWS/OBS) FOR COASTAL PLANNERS, DECISION MAKERS AND THE GENERAL PUBLIC, TO DETERMINE AND EVALUATE CHANGE AND TO RESOLVE CONFLICTS AMONG LAND USES, FISH AND WILDLIFE REQUIREMENTS, AND THE MAINTENANCE OF ECOLOGICAL DIVERSITY. THE STUDY AREA INCLUDES A MAJOR PORTION OF THE COASTAL COUNTIES OF PINELLAS, HILLSBOROUGH, MANATEE, AND A SMALL PORTION OF SARASOTA. THERE IS NO ATTEMPT, IN THE DESIGN OR PRODUCTS OF THIS STUDY, TO DEFINE THE LIMITS OF PROPRIETARY JURISDICTION OF ANY FEDERAL, STATE, OR LOCAL GOVERNMENT TO ESTABLISH THE GEOGRAPHICAL SCOPE OF THE REGULATORY PROGRAMS OF GOVERNMENT AGENCIES.

THIS MAP HAS BEEN COMPILED FROM A VARIETY OF SOURCE MATERIALS INCLUDING MAPS, AERIAL PHOTOS, AND REPORTS. SINCE MANY SOURCES CONTAINED GENERALIZED LOCATIONS OF RESOURCES AND OTHER MAPPED FEATURES, THE USER SHOULD NOT RELY ON THESE MAPS FOR PRECISE MEASUREMENTS OF DISTANCES OR AREAS.

PRIMARY SOURCES OF MAPPED INFORMATION

SALINITY: Conductivity for Tampa Bay water quality sampling stations Sept. 1978 - August 1983. Hillsborough County Environmental Protection Commission.

POINT SOURCE DISCHARGES: Computer printout of industrial and municipal point source discharges in West Central Florida. Florida Dept. of Environmental Regulation, 1983.

DREDGE SPOIL DISPOSAL AREAS: Dredge and Spoil easement location maps. Florida Dept. of Natural Resources.

N.O.S. TIDE STATIONS: Index of tide stations for the state of Florida. National Ocean Service, Rockville, Md. 1981.

WATER QUALITY: Total chlorophyll, conductivity, turbidity, temperature and total nitrogen data for Tampa Bay water quality stations, Sept. 1978 - August 1983. Hillsborough County Environmental Protection Commission.

BATHYMETRIC: Bathymetric map to St. Petersburg Quadrangle, N.O.S. 1978.

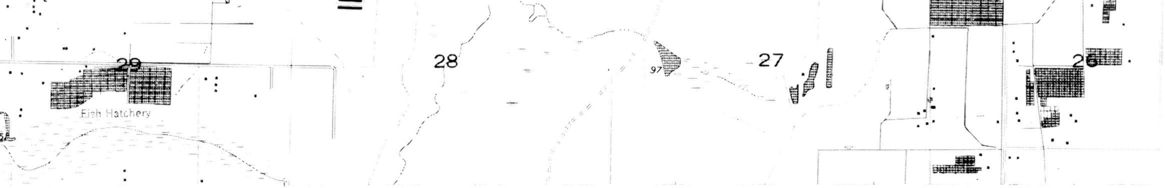
INTERTIDAL ZONE: Nautical Chart #'s 11410, 11413, 11414 an 11425. N.O.S., Rockville, Md. 1983.

SEDIMENTS: Sediments, oceanographic observations and Floristic data for Tampa Bay, Florida and adjacent waters, 1961-1965, Taylor and Saloman, 1969.

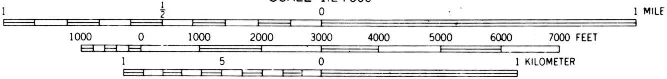
TIDAL CURRENTS: Changes in tidal flow, circulation and flushin caused by dredge and fill in Tampa Bay, Florida. U.S. Geological Survey Open File Report #84-447. Goodwin, 1984.

FRESHWATER-SALTWATER INTERFACE: Position of the Freshwater-Saltwater interface in the upper part of the Floridan aquifer, Southwest Florida, 1979. U.S.G.S. water resources open-file report 82-90. Causseaux and Fretwell, 1982.

FOR COMPLETE REFERENCE SEE MAP NARRATIVE

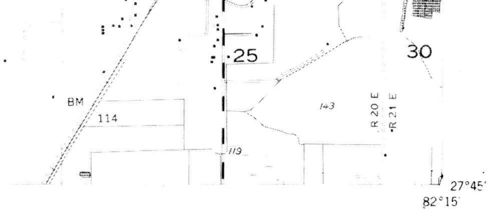


SCALE 1:24 000



od

g



indicated by the arrow and the discharge range is feet per second.

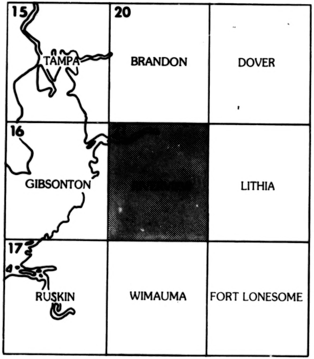
→	0.01 - 0.10 ft/sec
→	0.11 - 0.20 ft/sec
→	0.21 - 0.30 ft/sec
→	0.31 - 0.50 ft/sec
→	> 0.50 ft/sec

F
S

FRESHWATER/SALTWATER INTERFACE

(U.S. Geological Survey 1979)
250 mg/l line of equal chloride concentration in the upper part of Floridan aquifer.

**Symbols appearing with numbers are described more fully in the narrative*



Supplemental Legend for Water Quality Stations on This

Station #114 Lat. 27°51'27" Long. 82°16'11"

PARAMETER	SPRING (3-5)	SUMMER (6-8)	FALL (9-11)	WINTER (12-2)	ANNUAL (1-12)
Total Chlorophyll (ug/l)	No Data	No Data	No Data	6.8	—
Conductivity (mmhos)	523	463	973	551	628
Turbidity (NTU'S)	3.0	5.8	3.9	2.9	3.9
Temperature (°C)	22.3	26.5	23.6	15.8	22.1
Total Nitrogen (mg/l)	2.61	1.91	2.62	2.29	2.36

Station #132 Lat. 27°50'24" Long. 82°20'50"

PARAMETER	SPRING (3-5)	SUMMER (6-8)	FALL (9-11)	WINTER (12-2)	ANNUAL (1-12)
Total Chlorophyll (ug/l)	13.7	11.2	14.9	13.5	13.3
Conductivity (mmhos)	391	246	437	522	399
Turbidity (NTU'S)	4.0	13.2	5.1	5.3	6.9
Temperature (°C)	20.6	25.4	22.9	14.0	20.7
Total Nitrogen (mg/l)	1.14	1.41	1.24	1.37	1.29

Note: Specific conductivity values on the supplemental legend should be in μmhos.

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Map

EST CHART
2)